1854MNRAS..14..194A

Observations of Amphitrite, taken with the Meridian Circle at Bonn. By Professor Argelander.

(*Communicated by Albert Marth, Esq.*)

1854.	R.A. h m s	Decl. ° ′ ″	Mag.
March 19	13 5 48·08	−9 44 5·3	9·0
20	4 58·30	41 40·65	9·0
31	12 55 3·84	8 52·6	9
April 2	53 10·85	−9 1 57·6	br. 9
5	50 21·16	−8 51 12·3	9
6	49 24·51	47 32·0	9
9	46 36·95	36 25·9	faint 9
10	45 41·69	32 44·1	9
12	43 52·69	25 14·2	9
13	42 59·01	21 30·8	9
14	42 5·90	17 50·1	f. 9
16	40 21·57	10 28·7	br. 9·0
17	39 30·63	6 52·3	f. 9
18	38 40·73	−8 3 12·0	f. 9
19	12 37 51·31	−7 59 42·2	br. 9·0

On the Final Determination of the Longitude of Cambridge from Observations of Galvanic Signals.

(*Extract of a Letter from Professor Challis.*)

"Soon after the observations were made [in May last year], I communicated to the Astronomer Royal a provisional result, stating, at the same time, that I expected it would subsequently be modified by taking account of the effect of the forms of the transit-pivots. This first result is published in the *Monthly Notices*, Vol. XIII. p. 251. I recently completed the calculation of the corrections to be applied to the transit observations that were taken on May 17 and 18, 1853, for the determination of the true sidereal times of the signals, and have deduced on applying them the subjoined value of the longitude. These corrections were calculated by the method which I have described in the Society's *Memoirs*, Vol. XIX., p. 103, and are the mean results from two independent sets of measures which agreed well with each other. The calculations cost no little time and labour.

East Longitude of the Cambridge Observatory.

Method (A).

	s
May 17, By 146 signals	22·660
18, By 135 signals	22·713
Mean..............................	22·687

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Method (B).

	s
May 17, By 146 signals..................	22·601
18, By 135 signals..................	22·782
Mean..............................	22·691
Mean of the whole......	22·689

"Slight errors made in the first calculation being taken into account, the effect of the forms of the pivots is to make the longitude less eastward by $0^{s}\cdot32$. I propose hereafter to adopt $22^{s}\cdot69$ east for the longitude of the Cambridge observatory."

Errata in Weisse's Catalogue and in Lalande.

"The following particulars will show that observers may be put to considerable inconvenience by the imperfection of catalogues:—

"1854, May 8. Weisse xi. 552 was selected for comparison with *Bellona*. No star agreeing with the place of the catalogue is to be found in the heavens, nor in the original zones; but in zone 225 there is a star of the same R.A., and of equal *south* declination, viz. $-12^{\circ}\ 24'\ 24''\cdot1$.

"1854, May 16. No star to be found in the place of Weisse xv. 259, which was selected for comparison with *Thalia*. By reduction from the original zones it appeared that the declination should be $-13^{\circ}\ 17'\ 8''\cdot8$. The star is therefore the same as H.C. 28009.

"1854, May 23. In an attempt to observe *Euterpe* by means of H.C. 13739, no star could be found in the place of the catalogue. J. CHALLIS.

"*Cambridge Observatory, June* 2, 1854."

"The singular phenomenon of a mock moon was visible here on last Thursday evening, 30th March. The evening was perfectly clear and free from all apparent vapour, and as the sun went below the horizon the stars shone forth with the greatest brilliancy. About seven, being on the open fields, and turning to look at the moon, I thought it was larger than usual; and upon stedfastly looking at it, I distinctly saw the light of two moons bearing the following appearance, there being between the two space to the eye of about six inches — the reflected moon giving forth slight motion or shooting effulgences similar to the aurora borealis; whilst above, the whole disk of the moon became quite visible. Many persons saw the same, their attention being called to it, and watched the setting of the moon and its companion in the far west. C. E. WALKER.

"*Rectory, Clyst St. Lawrence, Devon.*"

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